
REMARKS

Upon entry of this Amendment, Claims 1 and 5 will be pending in the application. Claims 2-4 and 6 are canceled herein without prejudice or disclaimer. Entry of this Amendment and reconsideration and allowance of amended Claims 1 and 5 in view of the present comments are respectfully requested.

As a preliminary matter, Claim 1 is amended herein to recite that A represents at least one element selected from La, Nd, and Y, and B represents at least one element selected from Fe, Mn, and Al. Support for this amendment may be found in the specification *e.g.*, at page 8, lines 7-17. Therefore, no new matter is added by this amendment. Further, no new issues are raised by this amendment, as the recited formula in amended Claim 1 is within the previously recited genus.

The amendment to Claim 1 does not constitute an admission with respect to any rejection, but is being made solely to advance prosecution with respect to certain patentable subject matter. Applicants reserve the right to pursue the canceled subject matter in a continuation application.

Claim rejections under 35 U.S.C. §102(e)

Claims 1 and 5 stand rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Kaneko et al., “hereinafter Kaneko,” (US Patent 6,800,388 B2). Applicants respectfully traverse this rejection and request the withdrawal thereof, because Kaneko does not anticipate the present claims, for at least the reasons set forth herein and in the February 27, 2006 Amendment (which is incorporated herein by reference).

In particular, (1) Kaneko does not teach a catalyst within the presently claimed genus of catalysts and (2) the genus of Kaneko does not teach the presently claimed genus.

There is no teaching in Kaneko of a species within the scope of the presently claimed genus of catalysts. For example, as amended, the A constituent of the presently claimed Rh-containing catalyst is selected from the group consisting of La, Nd, and Y. The examples of Kaneko contain Sm (having a variable valence of 2 or 3) or Pr (having a variable valence of 3 or 4) in addition to La as the A constituent. In contrast, amended claim 1 includes only La, Nd, and/or Y as the A constituent and does not further include any elements corresponding to A' in Kaneko (such as Sm or Pr). Accordingly, for at least this reason, the examples of Kaneko do not anticipate the present claims.

The Examiner appears to be relying on the genus of Kaneko for an alleged anticipation of the claimed genus. In particular, the Action indicates that “[i]t is considered the disclosed catalyst composition [of Kaneko has] the same perovskite structure as being claimed since the metals are the same or the claimed metals are falling within the disclosed list of metals.” Action at p. 4. The Action relies on *In re Schaumann*, 572 F.2d 312, 197 USPQ 5 (CCPA 1978), to support the position that a claim may be anticipated “when the reference teaches a small genus which places a claimed species in the possession of the public and the species would have been obvious even if the genus were not sufficiently small to justify a rejection under 35 USC 102.” Applicants submit however, that reliance on *Schaumann* is misplaced here, because contrary to the present situation, in *Schaumann*, the reference taught a generic formula embracing a **limited** number of compounds closely related to each other in structure and **the properties possessed by the compound class of the prior art was that disclosed for the claimed compound**. In the relied upon embodiment of

Schaumann (i.e., that of claim 1), the embodiment was limited within the genus to a structure with only one variable substituent, R, which was limited to low alkyl radicals, and had only 7 compounds. Based on this one variable substituent, the Court found that one of ordinary skill in the art would at once envisage the subject matter within claim 1 of the reference.

In contrast to *Schaumann*, the number of compounds disclosed by Kaneko is not limited to 7, but is at least in the hundreds, particularly considering the numerous combinations of elements. In the present situation at least four components (A', A'', B', and B'') are all variable, and each of those positions may include more than one element (*see e.g.*, col. 2 lines 18-24 of Kaneko).

“It is well established that the disclosure of a genus in the prior art is not necessarily a disclosure of every species that is a member of that genus.” *Atofina v. Great Lakes Chemical Corporation*, No. 05-1359 at 13 (Fed. Cir. March 23, 2006), citing, *In re Baird*, 16 F.3d. 380, 382 (Fed. Cir. 1994). There may be many species encompassed within a genus that are not disclosed by a mere disclosure of the genus. *Atofina*, at 13.

The huge genus of Kaneko cannot be said to be a disclosure of each of the numerous species therein. As indicated above, each of the four components of Kaneko may be one or more elements. Because A' may be La and/or Ce, there are three possible components of A'. B' has 15 possible combinations for the four possible components, where the number of possible combinations grows factorially with each additional element, making the overall genus likely to encompass at least 1000 different combinations of elements without any teaching in the direction of the present invention. Given the considerable difference between the claimed catalysts and the compound of Kaneko, just as in *Atofina*, the reference does not describe the claimed genus with sufficient specificity to anticipate the claims.

In trying to narrow the reading of Kaneko, the Examiner argues that metals with the valence of 3 are among the suitable metals listed in the reference, and that one of ordinary skill in the art at the time the invention was made would at once envisage the metals with valence of 3 within the listed metals of the reference. See page 4 of the Action. Applicants dispute this conclusion however, because it uses hindsight to focus on only one of the elements and to ignore all of the other features of the present claims, such as the limitations on A and B and the required presence of Rh, which features are not taught by Kaneko individually, and certainly not in the specifically claimed combination.

Additionally, the compound class of Kaneko is for a different use than the presently claimed catalyst. In particular, Kaneko relates to a reforming catalyst for a fuel cell and an electrode catalyst. The presently claimed catalyst provides an exhaust purification catalyst having surprisingly excellent longevity, which is not suggested by Kaneko. The kind of activity required for the catalyst is remarkably different depending on the purpose of use. That is, there may be a case in which the catalyst is applicable to Kaneko's application, but not to the present invention, or vice-versa. Accordingly, one is not guided by Kaneko's composition (which has a different application) to the present invention.

Because Kaneko does not teach a species within the scope of the present claims, and because the genus of Kaneko does not teach the genus of the present claims or any species thereof, the present claims are not anticipated by Kaneko.

Furthermore, Kaneko does not render the present claims obvious. There is no teaching or suggestion in Kaneko of the specific combination of the present invention and there is no motivation in Kaneko for one to pick and choose particular elements to achieve the purpose of the present invention (which is not the objective of Kaneko). Kaneko does not

teach or suggest an Rh-containing catalyst wherein A is selected from La, Nd, and/or Y and B is selected from Fe, Mn, and/or Al.

Kaneko teaches away from the presently claimed perovskite structures in that the disclosed structures include certain alkaline earth metals, *e.g.*, Sr (strontium) and Ba (barium) having a valence of 2 as part of the A constituent, the presence of which contributes to the instability of an Rh-containing perovskite structure. Additionally, Kaneko teaches away from the presently claimed catalysts by including Co and Gd among the possible B constituents.

For at least these reasons, the present claims are believed to be novel and unobvious over Kaneko, and withdrawal of this rejection is believed to be appropriate and is respectfully requested.

Claim rejections under 35 U.S.C. §102(b)

Claims 1 and 5 stand rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Monceaux et al., “hereinafter Monceaux,” (US Patent 5,622,680). Applicants respectfully traverse this rejection and request the withdrawal thereof, because Monceaux does not anticipate the present claims, for at least the reasons set forth herein and in the February 27, 2006 Amendment.

In particular, similarly to Kaneko, (1) Monceaux does not teach a catalyst within the presently claimed genus and (2) the genus of Monceaux does not teach the presently claimed genus.

There is no teaching in Monceaux of a species within the scope of the presently claimed genus of catalysts. As indicated above, the A constituent of amended Claim 1 includes only La, Nd, and/or Y and does not further include other elements. In contrast, the

only Rh-containing species' set forth in Monceaux, also include Sr, which is the preferred L' in the reference (see col. 1, lines 60-62). As indicated in the background of the present application, when prior composite oxide catalysts include elements having a valence of 2, such as Sr on the A site, "Rh becomes unstable in the perovskite structure under oxidative-reducing atmospheres, its grains grow after long-term use and the resulting catalyst may exhibit remarkably reduced catalytic activity." Because the only Rh-including structures of Monceaux include Sr, and Sr is the preferred L' component of Monceaux, Monceaux does not teach the claimed catalysts, and does not anticipate the claimed invention.

With respect to the Monceaux genus, this genus encompasses even more species than Kaneko, thus, for at least the reasons indicated above with respect to Kaneko, Monceaux does not anticipate the present claims. In particular, the structure of Monceaux has the formula $L_x L'_{1-x} M_y M'_z \Phi_{1-y-z} O_3$, wherein L is an element selected from the lanthanides and the rare earth metals, L' is an element selected from Sr, Ca, Ba, Ce, K, Bi, Rb and Na, M is a transition metal selected from Cr, Mn, Fe, Co, Ni and Cu, M' is at least one metal selected from Pt, Ru, Pd, Rh, etc. (see col. 1, lines 40-57). The L component alone can be any of 44 elements, L' is any of 8 elements, M is any of 6 elements and M' is one or more of four elements (*i.e.*, 15 possible combinations of elements). Thus, this genus appears to include thousands of possible species.

Because Monceaux does not teach a species within the scope of the present claims, and the genus of Monceaux does not teach the genus of the present claims or any species thereof, the present claims are not anticipated by Monceaux.

Furthermore, Monceaux does not render the present claims obvious. There is no teaching or suggestion in Monceaux of the aspects of the present structure which provide the

excellent longevity of the present exhaust purification catalysts. The Rh-containing catalyst of the present invention, which includes La, Nd, and/or Y as the A element and Fe, Mn, and/or Al as the B element, is neither taught in nor suggested by Monceaux. In fact, Monceaux teaches away from the presently claimed structures in that the reference structures include certain alkaline earth metals having a valence of 2 as part of the A constituent (*e.g.*, Sr and Ba).

Additionally, Monceaux teaches away from the presently claimed catalysts because Co is a preferred metal for M in Monceaux (see Col. 1, lines 60-61), whereas Co is not on the corresponding B site of the present invention, in order to achieve the desired stability of Rh in the catalyst imparting long life. Accordingly, for at least these reasons, Monceaux does not render the present claims obvious

Withdrawal of this rejection is believed to be appropriate and is respectfully requested.

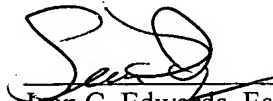
If the Examiner believes that there is any issue which could be resolved by a telephone or personal interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Amendment Under 37 C.F.R. §1.116
Application No. 10/519,980

Attorney Docket No. 71465.0009
Customer No. 57362

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee for such an extension is to be charged to Deposit Account No. 50-0951.

Respectfully submitted,



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